REMARKS/ARGUMENTS

The Applicant thanks the Examiner for the courtesy of the Telephonic Interview of 30 September 2009 in which the substance of the claims was discussed. By way of summary of the arguments, the attorney for the Applicant pointed out that the prior art did not include source image information that was generated directly from a digital source, which has implications on resolution, clarity, and the like. As the Examiner stated in the Interview Summary, the prior art fails to disclose the claimed subject matter. Accordingly, the Applicant was invited to respond in light of the withdrawn final rejection.

In order to expedite prosecution and streamline the burden of a further search, the Applicant has amended the independent apparatus and method claims 9 and 17 to explicitly include the term "directly" in order to more clearly highlight the difference with the prior art of record. In addition, claims 15 and 25 have been amended to place those claims in independent form, with claim 25 incorporating method claim 17. Dependency of the remaining claims has been chanced to further expedite prosecution.

Thus, amended claims 9 and 17 now stand as independent claims with no dependent claims and claims 15 and 25 stand as independent claims, each with a set of dependent claims.

The present application is one of a series of related patent applications based on similar disclosure that address techniques for transferring *digitally authored* moving picture content of extremely high resolution, *where the source is not videotape or film*, to a movie film. There is no recording of video anywhere in the claimed process. There is no attempt to make the image more like a film image than the source, since the original source is recorded to film. These are fundamental distinctions. This invention and other claimed inventions in this series represent a departure from telecine techniques as well as laser scribing techniques.

By way of full disclosure, two patents related to this application have now issued: U.S. Patent No. 7,463,821 and 7, 576,830, whereas Applications 10/698,985 and 10/392,399 are pending and claims have been consolidated in to one application. The primary reference in each case has also been Ramsay et al.

This invention focuses on the preservation of the spatial and depth resolution of the frame data at the film recording unit.

The Applicant contends that the present invention should not be confused with the plethora of art related to the telecine process. The primary cited art has to do with telecine or inverse telecine processes in which there is source material is recorded on media—film or tape—and which must be reproduced in a further generation away from the original (e.g., real-life) image. The Applicant submits that those references are largely irrelevant for reasons herein further articulated.

The prior art to which this invention is addressed and is to be contrasted is the laser scribe technique of writing digital data with scanning multicolor lasers onto film. By contrast, this invention provides that the digital data be written to a display device, namely an electronically addressable digital flat panel display, wherein successively displayed full frame still images are successively photographed in high resolution onto successive frames of continuous movie film. In the most general embodiment (claim 1), the source image is presented in a manner that directly drives the pixels of the flat panel display. Noteworthy is that the present invention involves display from direct digital source that is captured optically to film, whereas the art involves scribing from a direct source onto film media.

In further embodiments (e.g., claims 15, 25), the same source image is presented by driving one or more digital light projectors which in turn each project the same still image onto the back side of the flat panel display from the film recording element in order to enhance illumination and depth resolution in precise alignment with the image created *in* the flat panel display so that the spatial resolution is not substantially degraded when it is photographed. There is nothing of which the Applicant is aware that did anything like this prior to this invention.

Heretofore digital imagery has been criticized as lacking in spatial and depth resolution as compared to film. Conventional photographing of digital images has heretofore been thought not to be able to compete with laser-scribe-based recording to film. However, laser scribing is extremely slow, cumbersome and expensive. This invention has taken a different approach, against conventional wisdom, to photograph to movie film from a high resolution digital flat panel display devices driven directly from a digital source, a source that has not

previously been used in this manner to make films of digital movies. It is believed that this invention solves the problem of the aerial image recording process, enabling image recording to be speeded up substantially while preserving spatial, color and depth resolution created by the source material.

As noted, the primary reference cited against claims 9-12, 14-23 and 25 is the patent to Ramsay et al., U.S. Pat. No. 4,757,374. For the reasons stated, the Applicant respectfully traverses Ramsay and contends that it does not suggest the present invention in any meaningful way, particularly as now amended.

Regarding claims 15 and 25 respecting an additional illumination source, the illumination source herein contemplated is in addition to that provided as part of the flat panel display. The secondary illumination source is typically a digital light protection (DLP) device whereby the same still image presented on the flat panel display is projected onto the back of the flat panel display. While that element, when used to provide rear projection of the image, may lack the high resolution of a directly driven display, it is of sufficient resolution to increase brightness and enhance darkness and colors of the hybrid image as viewed by the film camera. In Ramsay, there is no teaching of a flat panel display source, let alone a DLP source serving as an enhancing backlight. These following passages in Ramsay either make no mention of light source (column 4, lines 62-67) or merely reference it in passing as being of a "suitable" type (column 7, lines 53-57), without any indication that illumination may be supplemental and image-specific.

The citation of other references has been noted. However, many of those references are also relevant primarily for correcting problems with the telecine process, which is of relatively low resolution. Claim 15 and even more so claim 25 (using multiple image-specific illumination sources), therefore recite patentable subject matter.

Ramsay has been cited in combination with others, including Lippmann and Kodak's Bogdanowicz US2002/0163657 corresponding to USP 6,987,586 for projecting DLP images. As taught at paragraph [0003] of the issued Bogdanowicz patent, the prior art of interest therein was systems for rendering the output of a video camera to simulate the visual appearance of motion picture film that has been transferred or converted to a video signal to be output

directly for television broadcasting or recording on video tape and the alteration of the apparent contrast of the video image so that the desired broadcast film appearance may be obtained. However, Bogdanowicz is distinguishable in that the DLP merely displays the images to a screen in parallel with a CRT monitor and the film recording process is actually direct digital extraction, exactly the type of process the present invention avoids. Hence, Bogdanowicz is actually teaching away from the present invention.

By way of perspective and summary, this invention contributes commercially valuable new processes for producing theater-quality movie film from digital, computer-generated source material. It overcomes some of the significant problems associated with film production from digital image sources. By contrast, the cited art is unrelated to this problem.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (650) 326-2400.

Respectfully submitted,

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